

WHAT IS CLAIMED IS:

1. A semiconductor device having a sealing structure for a semiconductor chip, comprising:

5 a plurality of main electrodes provided on main surfaces of the semiconductor chip;

a plurality of external electrodes electrically connected to the main electrodes via connection members, respectively;

10 a sealing member made of a glass based sealing material for encapsulating at least the semiconductor chip, the main electrodes and the connection members; and

15 a brazing member made of a silver based brazing material having a high fusing point, which is provided for integrally connecting between a part of the main electrodes and a part of the external electrodes,

wherein the semiconductor chip is of a wide gap type, and the fusing point of the glass based sealing material is lower than that of the silver based brazing material.

20 2. The semiconductor device according to claim 1, wherein the brazing material serves as a passage for dissipating heat to the outside.

25 3. A semiconductor device having a sealing structure for a semiconductor chip, comprising:

a plurality of main electrodes provided on main surfaces of the semiconductor chip;

a plurality of external electrodes directly and electrically connected to the main electrodes by pressure
5 contact, respectively; and

a sealing member made of a glass based sealing material for encapsulating at least the semiconductor chip, the main electrodes and connected portions of the external electrodes,

10 wherein the semiconductor chip is of a wide gap type.